

# PATENT ABSTRACTS OF JAPAN

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## (54) LIQUID CRYSTAL ORIENTATION METHOD AND LIQUID CRYSTAL ELEMENT

### (57)Abstract:

PURPOSE: To provide the liquid crystal orientation method which is free from problems with thicknesses without using a rubbing system which flaws substrates.

CONSTITUTION: A uniaxial member is brought into tight contact with the surfaces of the substrates to transfer unaxiality onto the substrates and the member is thereafter removed to orient the liquid crystal molecules to be held by these substrates. Then, the orientation is effected by the transfer effect, and therefore there is no operation of rubbing, unlike with the conventional rubbing method. The generation of flaws or dust is thus obviated and the display grade is not impaired. While the reduction of the thickness is difficult with the conventional high-polymer stretching method, a high-polymer film is a mere transfer material and the problems with the thicknesses are eliminated by removing the film afterward.